

CLAIMS

1. A liquid fuel container comprising:

5 a liquid fuel holding section that is configured to hold a liquid fuel used for electric power generation in a fuel cell system while allowing the fuel to be supplied to the fuel cell system; and

10 a coloring agent, which is placed in at least part of an outer peripheral portion of the liquid fuel holding section, for changing color of the liquid fuel by coming in contact with the liquid fuel leaked from the liquid fuel holding section.

2. The liquid fuel container as defined in claim 1, wherein the coloring agent is placed so as to cover roughly
15 entire outer peripheral portion of the liquid fuel holding section.

3. The liquid fuel container as defined in claim 1, wherein

20 the liquid fuel holding section has a connection port for connecting to a fuel cell body in the fuel cell system so as to allow the held liquid fuel to be supplied, and

25 the coloring agent is placed in a neighborhood of the connection port at the outer peripheral portion of the liquid fuel holding section.

4. The liquid fuel container as defined in claim 1, further comprising:

a coloring agent holding section that is configured to hold the coloring agent in a state in which the coloring agent is placed at the outer peripheral portion of the liquid fuel holding section.

5. The liquid fuel container as defined in claim 1, wherein the liquid fuel is methanol, and the coloring agent is formed containing cobalt chloride of a solid phase.

6. The liquid fuel container as defined in claim 4, wherein the liquid fuel is methanol, and the coloring agent is cobalt chloride aqueous solution.

7. The liquid fuel container as defined in claim 6, wherein

the coloring agent holding section is configured to introduce part of water generated by electric power generation in the fuel cell system connected to the liquid fuel container so as to allow the liquid fuel held in the liquid fuel container to be supplied, and

the cobalt chloride aqueous solution is generated by the water introduced into the coloring agent holding section and the held cobalt chloride of a solid phase.

8. The liquid fuel container as defined in claim 1, further comprising:

a product holding section that is configured to

collect and hold water generated by electric power generation in the fuel cell system,

wherein the coloring agent is placed at the outer peripheral portions of the liquid fuel container and the product holding section, and leakage of the liquid fuel and leakage of the water are detected by a difference in a change of color colored by the coloring agent.

9. The liquid fuel container as defined in claim 4, wherein the coloring agent holding suction has a visual recognition window that allows a state of color of the coloring agent to be visually recognized through the window.

10. The liquid fuel container as defined in claim 4, wherein the coloring agent holding suction further comprises an absorber for absorbing and retaining the liquid fuel leaked from the liquid fuel holding section.

11. A fuel cell system comprising:

a container mounting portion on which the liquid fuel container as defined in any one of claims 1 through 10 is detachably mounted, and

a fuel cell body for generating electric power by using the liquid fuel supplied from the liquid fuel container mounted on the container mounting portion.

12. A portable information terminal device including a power source of the fuel cell system that has a container mounting portion on which the liquid fuel container as

defined in claim 9 is detachably mounted and a fuel cell body for generating electric power by using the liquid fuel supplied from the liquid fuel container mounted on the container mounting portion, the terminal device comprising:

5 a device-side visual recognition window, which allows the state of the color of the coloring agent to be visually recognized through the visual recognition window of the liquid fuel container in a state where the container is mounted on the container mounting portion and is
10 provided in a position aligned with the visual recognition window.